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## SEARCH REQUEST FORM

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## Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

Please search claim 28-33, as they relate to a nucleic acid that encodes a chimeric polypeptide comprising a serum albumin (SA) protein having a biologically active heterologous peptide sequence inserted therein (claim).

## Point of Contact:

Mona Smith

Technical Info. Specialist

CM1 12C14 Tel: 308-3278

## STAFF USE ONLY

Date completed: 2/3/02

Searcher: M. Smith

Terminal time: 65

Elapsed time:

CPU time: 40

Total time: 105

Number of Searches:

Number of Databases:

## Search Site

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CM-1

Pre-S

## Type of Search

N.A. Sequence

A.A. Sequence

Structure

X Bibliographic

## Vendors

IG Suite

STN

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APS

Geninfo

SDC

DARC/Questel

Other

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File 155:MEDLINE(R) 1966-2002/Jan W2  
 File 5:Biosis Previews(R) 1969-2002/Feb W1  
     (c) 2002 BIOSIS  
 File 34:SciSearch(R) Cited Ref Sci 1990-2002/Feb W2  
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 File 71:ELSEVIER BIOBASE 1994-2002/Feb W1  
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 File 73:EMBASE 1974-2002/Feb W1  
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     (c) 2002 Cambridge Sci Abs  
 File 351:Derwent WPI 1963-2001/UD,UM &UP=200208  
     (c) 2002 Derwent Info Ltd  
 File 357:Derwent Biotechnology Abs 1982-2002/Feb B2  
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 File 440:Current Contents Search(R) 1990-2002/Feb W2  
     (c) 2002 Inst for Sci Info

?ds

Set	Items	Description
S1	16	(SERUM(W)ALBUMIN) (S) (HETEROLOGOUS(W) (PEPTIDE? OR PROTEIN? OR POLYPEPTIDE?) OR ANGIOSTA? OR ENDOSTAT? OR CYSTEINE(5N) LOO-P?) (S) (KINASE OR CYTOKINE? OR G(W)PROTEIN? OR MIRR OR ORPHAN-?)
S2	10	RD (unique items)

?t2/3 ab/1-10

2/AB/1 (Item 1 from file: 155)  
 DIALOG(R) File 155:MEDLINE(R)

08364141 95208349 PMID: 7900418  
 Physiological approach to heterologous human serum albumin production by Kluyveromyces lactis in chemostat culture.  
 Blondeau K; Boze H; Jung G; Moulin G; Galzy P  
 Chaire de Microbiologie Industrielle et de Genetique des Micro-organismes, ENSA-INRA, Montpellier, France.  
 Yeast (ENGLAND) Oct 1994, 10 (10) p1297-303, ISSN 0749-503X  
 Journal Code: YEA

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Production of recombinant human serum albumin (rHSA) controlled by the constitutive promoter phosphoglycerate kinase was studied in Kluyveromyces lactis. It was governed by both cell concentration and glycolytic flow. The triggering of the fermentation metabolism by unfavourable culture conditions (pH, pO<sub>2</sub>, D) caused a decrease in the synthesis of the heterologous protein. The highest productivity (75 mg l<sup>-1</sup> per h) and rHSA concentration (62 mg l<sup>-1</sup>) were obtained in chemostat culture with a dilution rate of 0.12 h<sup>-1</sup> and with 38 g l<sup>-1</sup> dry weight.

2/AB/2 (Item 1 from file: 71)  
 DIALOG(R) File 71:ELSEVIER BIOBASE  
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00161807 94166356  
 Physiological approach to heterologous human serum albumin production by Kluyvevornyces lactis in chemostat culture  
 Blondeau K.; Boze H.; Jung G.; Moulin G.; Galzy P.  
 ADDRESS: G. Moulin, Chaire de Microbiologie Industrielle, ENSA-INRA, Place

Pierre Viala, 34060 Montpellier cedex, France  
 Journal: Yeast, 10/10 (1297-1303), 1994, United Kingdom  
 PUBLICATION DATE: 19940000  
 CODEN: YESTE  
 ISSN: 0749-503X  
 DOCUMENT TYPE: Article  
 LANGUAGES: English SUMMARY LANGUAGES: English

Production of recombinant human serum albumin (rHSA) controlled by the constitutive promoter phosphoglycerate kinase was studied in *Kluyveromyces lactis*. It was governed by both cell concentration and glycolytic flow. The triggering of the fermentation metabolism by unfavourable culture conditions (pH, pO<sub>2</sub>, D) caused a decrease in the synthesis of the heterologous protein. The highest productivity (75 mg l<sup>-1</sup> h<sup>-1</sup>) and rHSA concentration (62 mg l<sup>-1</sup>) were obtained in chemostat culture with a dilution rate of 0.12 h<sup>-1</sup> and with 38 g l<sup>-1</sup> dry weight.

2/AB/3 (Item 1 from file: 351)  
 DIALOG(R) File 351:Derwent WPI  
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014123438  
 WPI Acc No: 2001-607650/200169  
 XRAM Acc No: C01-180619  
 XRPX Acc No: N01-453583

Detecting antigen and/or antibody in immune complexes from a sample, comprises capturing and dissociating circulating immune complex, reassociating with reference material, detecting and quantitating the reference material

Patent Assignee: DIAGEN CORP (DIAG-N); RACIS S P (RACI-I)

Inventor: RACIS S P

Number of Countries: 095 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200173437	A2	20011004	WO 2001US9344	A	20010323	200169 B
US 20010051351	A1	20011213	US 2000192472	A	20000327	200204
			US 2001816271	A	20010323	
AU 200147722	A	20011008	AU 200147722	A	20010323	200208

Priority Applications (No Type Date): US 2000192472 P 20000327; US 2001816271 A 20010323

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200173437 A2 E 51 G01N-033/543

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

US 20010051351 A1 G01N-033/574 Provisional application US 2000192472

AU 200147722 A G01N-033/543 Based on patent WO 200173437

Abstract (Basic): WO 200173437 A2

Abstract (Basic):

NOVELTY - Detecting (M) presence of an antigen, antibody, or both antigen and antibody in immune complexes, involves capturing a circulating immune complex from a sample, dissociating the captured

immune complex, re-associating the dissociated immune complex with a reference material to form a reformed immune complex, and detecting and quantitating the reference material in the reformed immune complex.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a well (I) for use in a spectrophotometer having a light source, where (I) comprises one or more surface area increasing members, and is made of a material that remains substantially optically transparent in an appropriate substrate buffer; and

(2) a kit (II) for detecting antigen, antibody, or both antigen and antibody in immune complexes in a mixture, comprising a marker, and a reference material, where the reference material is selected from antibodies and receptors.

USE - (M) is useful for detecting the presence of antigen, antibody, or both antigen and antibody in immune complexes from a sample (claimed) for diagnosing numerous diseases. (M) is useful to detect proteins that the immune system recognizes as important in disease. (M) is useful for a host of diseases and conditions for which markers for the disease or conditions have been identified, and to elucidate and/or screen for the humoral immune response's targets within selected individuals, groups of individuals with shared diseases or conditions, and microarray data suggesting sets of activated genes or altered proteomic profiles. A kit (II) is useful for detection of many types of diseases, such as autoimmune diseases, oncology (cancer) and infectious diseases.

ADVANTAGE - (M) detects markers that current tests miss and detects initial and recurring tumors earlier with less false positive and negative results, and as a result redefines the way science deals with proteins (selective proteomics) and accelerates the development of such products as disease diagnostics, prognostic markers and therapeutics. (M) detects various proteins earlier and more precisely than currently available diagnostic techniques as (M) uses the body's ability to be immune based. (M) allows the physician to see how well or poorly the patient's immune system is dealing with the disease. (M) aids in monitoring recurrence because there is no test available that reliably detects recurrent breast cancer until the disease is incurable. (M) also finds novel tumor antigens because many of the best selling drugs either act by targeting proteins or are proteins. (M) finds evidence of diseases in ways existing kits cannot, and has a profound effect on the way diseases are diagnosed, recurrences are detected and molecular therapeutic targets are discovered. (M) allows individuals to be treated with drug therapy sooner and more accurately, thus enhancing a patient's chance for recovery. (M) is beneficial to all patient subtypes, and especially beneficial for younger patients for whom current diagnostic modalities, such as mammograms, are not very sensitive. (M) supports a range of blood tests, not only for breast cancer, but for various cancers, and for autoimmune disorders and infectious diseases.

pp; 51 DwgNo 0/4

2/AB/4 (Item 2 from file: 351)  
DIALOG(R) File 351:Derwent WPI  
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013806713  
WPI Acc No: 2001-290925/200130  
XRAM Acc No: C01-089281  
XRPX Acc No: N01-207764

Producing a post-translationally modified heterologous polypeptide such as immunoglobulin, integrin, addressin, selectin, in plant host system,

comprises altering natural post-translational modification abilities of plant

Patent Assignee: MONSANTO CO (MONS )

Inventor: BASSUNER R; MANJUNATH S; RUSSELL D

Number of Countries: 093 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200129242	A2	20010426	WO 2000US29027	A	20001020	200130 B
AU 200115736	A	20010430	AU 200115736	A	20001020	200148

Priority Applications (No Type Date): US 2000195282 P 20000407; US 99160758 P 19991021

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200129242 A2 E 132 C12N-015/82

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200115736 A C12N-015/82 Based on patent WO 200129242

Abstract (Basic): WO 200129242 A2

Abstract (Basic):

NOVELTY - Producing (M1) a post-translationally (PT) modified heterologous polypeptide in a plant host system (I) comprising altering the natural PT modification abilities of (I), is new.

DETAILED DESCRIPTION - Producing (M1) a post-translationally (PT) modified heterologous polypeptide in a plant host system (I) comprising:

(a) expressing the heterologous polypeptide, where the cells of (I) have been transformed with one or more expression vectors containing a nucleic acid sequence encoding a heterologous polypeptide;

(b) expressing a PT modifying enzyme, where the cells of (I) have been transformed with an expression vector containing a nucleic acid sequence encoding a PT modifying enzyme;

(c) expressing a heterologous polypeptide and a PT modifying enzyme where the cells of (I) have been transformed with a first expression vector containing a nucleic acid sequence encoding a heterologous polypeptide and a second expression vector containing a nucleic acid sequence encoding a PT modifying enzyme; and

(d) cross-pollinating a first (I) whose cells have been transformed with a first expression vector containing a nucleic acid sequence encoding a heterologous polypeptide, and a second (I), where the cells of (I) have been transformed with a second expression vector containing a nucleic acid sequence encoding a PT modifying enzyme.

INDEPENDENT CLAIMS are also included for the following:

(1) (I) expressing a PT-modified heterologous polypeptide where the natural PT modification abilities of (I) have been altered where

(a) the cells of (I) have been transformed with:

(i) an expression vector comprising a nucleic acid sequence encoding a heterologous polypeptide;

(ii) an expression vector comprising a PT modifying enzyme;

(iii) a first expression vector comprising a nucleic acid sequence encoding a heterologous polypeptide and a second expression vector comprising a nucleic acid sequence encoding a PT modifying enzyme;

(b) (I) that produces PT modified heterologous polypeptide and expresses a first expression vector comprising a nucleic acid sequence encoding a heterologous polypeptide and a second express vector comprising a nucleic acid sequence encoding a PT modifying enzyme;

- (2) a plant (II) produced by M1;
- (3) a seed produced from (II); and
- (4) an expression vector comprising one or more nucleic acid sequences encoding one or more of heterologous polypeptide and a PT modifying enzyme.

USE - Producing in a plant host system, a post-translationally modified heterologous polypeptide such as immunoglobulin, integrin, addressin, selectin, homing receptor, T-cell receptor unit, soluble major histocompatibility complex antigen, growth factor receptor, growth factor, growth hormone, cell cycle protein, viral antigen, bacterial antigen vaccine, fibrinogen, thrombin or hyaluronic acid, a blood protein (e.g. serum albumin, hemoglobin, Factor VII, Factor VIII modified Factor VIII, Factor IX, Factor X, tissue plasminogen factor, Protein C, von Willebrand factor, antithrombin III, and erythropoietin), a colony stimulating factor (e.g. granulocyte colony-stimulating factor, macrophage colony-stimulating factor and granulocyte macrophage colony-stimulating factor), a cytokine (e.g. interleukins 1 through 18, interleukin-T, interferon alpha, interferon beta, interferon gamma, leukemia inhibitory factor, oncostatin, transforming growth factor beta, tumor necrosis factor alpha, and tumor necrosis factor beta), a membrane surface protein (e.g. insulin receptor, epidermal growth factor receptor, and beta-adrenergic receptor), a structural protein (e.g. collagen types I through XX, fibrinogen, elastin, tubulin, actin and myosin), or an antibody or its functional equivalent (e.g. immunoglobulin (Ig) IgA, IgG, IgD, IgE, IgM, Fab and Fv) (claimed).

pp; 132 DwgNo 0/24

2/AB/5 (Item 3 from file: 351)  
DIALOG(R)File 351:Derwent WPI  
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013010266

WPI Acc No: 2000-182118/200016

XRAM Acc No: C00-056857

New formaldehyde dehydrogenase gene for methylotrophic yeast, useful as selection marker, also its promoter for regulated expression of heterologous polypeptides

Patent Assignee: RESEARCH CORP TECHNOLOGIES INC (RESE )

Inventor: CREGG J M

Number of Countries: 025 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200001829	A2	20000113	WO 99US15016	A	19990702	200016 B
AU 9949666	A	20000124	AU 9949666	A	19990702	200027
EP 1095150	A2	20010502	EP 99933660	A	19990702	200125
			WO 99US15016	A	19990702	

Priority Applications (No Type Date): US 9891699 P 19980703

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200001829 A2 E 100 C12N-015/53

Designated States (National): AU CA IL JP MX NO

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU

MC NL PT SE

AU 9949666 A C12N-015/53 Based on patent WO 200001829

EP 1095150 A2 E C12N-015/53 Based on patent WO 200001829

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI

LU MC NL PT SE

Abstract (Basic): WO 200001829 A2

Abstract (Basic):

NOVELTY - Nucleic acid (I) comprising a formaldehyde dehydrogenase (FLD) gene from a methylotrophic yeast (MY).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) an isolated nucleic acid (Ia) comprising an FLD promoter;
- (b) an isolated nucleic acid (Ib) comprising a FLD 3'-termination sequence;
- (c) a vector comprising (I), (Ia) or (Ib);
- (d) host cells containing (I), (Ia), (Ib) or the vector of (c);
- (e) an expression cassette (EC) comprising (Ia) operably linked to a heterologous gene (II);
- (f) expression vector containing EC;
- (g) host cell containing EC or the expression vector of (f);
- (h) method for expressing (II) in MY;
- (i) method for selecting a formaldehyde-resistant host cell;
- (j) strain of MY deficient in an FLD gene;
- (k) kit comprising:
  - (i) an EC containing (Ia) and a 3'-terminator, functional in MY that between them have at least one restriction site for the insertion of (II) and
  - (ii) a vector that can replicate in MY, or integrate into its genome, and includes a marker gene and at least one restriction site for insertion of EC; and
  - (l) a kit containing an expression vector carrying FLD as a marker gene and an EC as in (l), provided that the promoter need not be (Ia).

USE - FLD imparts formaldehyde resistance to cells, and is useful as a selection marker in MY. The regulatory sequences (promoter and terminator) from FLD are used to control expression of heterologous proteins, specifically human serum albumin; invertase; bovine lysozyme; human or murine epidermal growth factors; aprotinin; Kunitz protease inhibitor; hepatitis B surface antigen; tumor necrosis factor; tetanus toxin fragment C; pertussis antigen; p69; streptokinase; beta-galactosidase or Bacillus crystal protein toxin.

ADVANTAGE - FLD resistance is a marker that does not confer antibiotic resistance and can be selected independently of the Pichia pastoris genotype. FLD promoters are strongly induced with methanol and/or methylamine, within the same strain, resulting in a level of heterologous gene expression comparable with that provided by the alcohol oxidase I gene promoter, but without the need for volatile and inflammable methanol as inducer.

pp; 100 DwgNo 0/11

2/AB/6 (Item 4 from file: 351)

DIALOG(R) File 351:Derwent WPI

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011209072

WPI Acc No: 1997-186997/199717

XRAM Acc No: C97-059688

Process for producing a protein - comprises transferring yeast to express heterologous protein cultured in medium, useful in prodn. of heterologous yeast by yeast transformant

Patent Assignee: GREEN CROSS CORP (GREC )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 9047295	A	19970218	JP 95224690	A	19950808	199717 B

Priority Applications (No Type Date): JP 95224690 A 19950808

Patent Details:

Patent No	Kind	Lang	Pg	Main IPC	Filing Notes
JP 9047295	A		20	C12P-021/02	

Abstract (Basic): JP 9047295 A

Process for producing a heterologous protein comprises transferring yeast so as to express a heterologous protein is cultured while the medium is maintained at pH 6.5-8.5 at the time of expression of the heterologous protein, followed by collection of the heterologous protein from the culture.

Also claimed are: a process for producing a heterologous protein in which yeast transformed so as to express a heterologous protein is cultured in a medium contg. not less than 4% (W/V) protein hydrolysate by an enzyme, and the heterologous protein in which yeast transformed so as to express a heterologous protein is cultured in a medium contg. not less than 0.2 M arginine, and the heterologous protein is then collected from the culture.

The yeast transformed is a yeast belonging to the genus *Pichia*. A typical example is *Pichia pastoris*.

The heterologous protein may be any protein such as naturally occurring proteins, their mutants or their artificially modified proteins. Examples are urokinase, prourokinase, human serum albumin, interferon, interleukin, insulin, growth hormone, amylase and urinary trypsin inhibitor.

USE/ADVANTAGE - Used for prodn. of a heterologous protein by a yeast transformant. Due to the conditions of the invention cause enzymes in yeast to be inhibited, a heterologous protein produced by the yeast transformant can be obtd. efficiently without undergoing decomposition with the inherent enzymes in the yeast.

Dwg.0/15

2/AB/7 (Item 1 from file: 357)

DIALOG(R) File 357:Derwent Biotechnology Abs

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0231550 DBA Accession No.: 99-01651 PATENT

Inhibition of growth of tumors or inducing apoptosis - adeno virus vector-mediated human, mouse urokinase or plasminogen gene transfer for cancer gene therapy.

AUTHOR: Li H; Lu H; Grisicelli F; Opolon P; Soria C; Ragot T; Legrand Y; Soria J; Ma-Bilat C; Perricaudet M; Yeh P

CORPORATE SOURCE: Antony, France.

PATENT ASSIGNEE: Rhone-Poulenc-Rorer 1998

PATENT NUMBER: WO 9849321 PATENT DATE: 981105 WPI ACCESSION NO.: 99-009437 (9901)

PRIORITY APPLIC. NO.: US 44980 APPLIC. DATE: 970428

NATIONAL APPLIC. NO.: WO 98EP2491 APPLIC. DATE: 980427

LANGUAGE: English

ABSTRACT: A method for inhibiting growth of a tumor (e.g. lung or mamma carcinoma) is new and involves treating it with a defective adeno virus vector (such as a human adeno virus-2 or -5 vector with especially both E1 and E4 genes deleted) containing a gene encoding an antiangiogenic factor, linked to appropriate expression control elements. The anti-angiogenic factor comprises a sequence of a N-terminal fragment of urokinase (EC-3.4.21.73), mouse or human, having an EGF-like domain, with the proviso the factor is not urokinase. The anti-angiogenic factor is angiostatin preferably with kringles 1 to 3, where the angiostatin is a N-terminal fragment of human plasminogen. The gene can also be expressed as a fusion with an immunoglobulin or human serum



albumin . The vectors may also be retro viruses, herpes virus or adeno-associated viruses or non-viral vectors such as liposomes and DNA plasmids. In an example, MDA-MD-231 (ATCC HTB26) carcinoma cells were injected into the backs of nude mice to produce tumors. Animals treated with the recombinant virus AdmATF had reduced tumor growth. (58pp)

2/AB/8 (Item 2 from file: 357)  
DIALOG(R)File 357:Derwent Biotechnology Abs  
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0224707 DBA Accession No.: 98-06304 PATENT  
New modified host cells - e.g. *Saccharomyces cerevisiae* expressing a heterologous protein, produced by mutagenesis, a mutation, gene replacement or an antisense technique

AUTHOR: Lehmebeck J  
CORPORATE SOURCE: Bagsvaerd, Denmark.  
PATENT ASSIGNEE: Novo-Nordisk 1998  
PATENT NUMBER: WO 9812300 PATENT DATE: 980326 WPI ACCESSION NO.:  
98-217244 (9819)

PRIORITY APPLIC. NO.: DK 96102496 APPLIC. DATE: 960919  
NATIONAL APPLIC. NO.: WO 97DK397 APPLIC. DATE: 970919  
LANGUAGE: English

ABSTRACT: A new host cell (I) that has been genetically modified to express reduced levels of e.g. *Fusarium oxysporum* NpI, NpII or p45 metalloprotease and e.g. *Aspergillus* sp. alkaline protease, is useful for the expression of a heterologous protein product (II). (I) is preferably *Saccharomyces cerevisiae*, but may also be *Acremonium* sp., *Aspergillus nidulans*, *Aspergillus awamori*, *Aspergillus phoenicis*, *Aspergillus japonicus*, *Aspergillus foetus*, *Candida* sp., *Cochliobolus* sp., *Endothia* sp., *Fusarium oxysporum*, *Fusarium solani*, *Humicola grisea*, *Neurospora crassa*, *Rhizomucor meihei*, *Rhizopus* sp., *Thermomyces* sp., *Trichoderma reesei*, *Trichoderma viride*, *Podospora* sp., *Pyricularia* sp. or *Penicillium chrysogenum*. (II) may be: insulin, somatotropin, glucagon, somatostatin, interferon, erythropoietin, thrombopoietin, Factor-VII, Factor-VIII, urokinase (EC-3.4.21.73), chymosin (EC-3.4.23.4), tissue plasminogen-activator (EC-3.4.21.68) or serum albumin ; or an enzyme such as alpha-amylase (EC-3.2.1.1), beta-amylase (EC-3.2.1.2), glucoamylase (EC-3.2.1.3), beta-galactosidase (EC-3.2.1.23), peroxidase (EC-1.11.1.7), laccase (EC-1.10.3.2) or polygalacturonase (EC-3.2.1.15), etc. (49pp)

2/AB/9 (Item 3 from file: 357)  
DIALOG(R)File 357:Derwent Biotechnology Abs  
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0197943 DBA Accession No.: 96-08714 PATENT  
Expressing respiratory-syncytial virus G protein at cell surface - fusion protein production by vector plasmid expression in *Staphylococcus xylosus* or *Staphylococcus carnosus*, for application in recombinant vaccine production

AUTHOR: Binz H; Nguyen Ngoc T; Stahl S; Uhlen M; Nygren P A  
CORPORATE SOURCE: Boulogne, France.  
PATENT ASSIGNEE: Pierre-Fabre-Med. 1996  
PATENT NUMBER: WO 9614418 PATENT DATE: 960517 WPI ACCESSION NO.:  
96-251768 (9625)

PRIORITY APPLIC. NO.: FR 9413309 APPLIC. DATE: 941107  
NATIONAL APPLIC. NO.: WO 95FR1465 APPLIC. DATE: 951107  
LANGUAGE: French

ABSTRACT: Production of heterologous polypeptide (I) containing the

130-230 amino acid region of protein G of respiratory-syncytial virus (RSV) (or a sequence at least 80% homologous with this region) involves introducing into bacteria that are not pathogenic for mammals, a DNA sequence (II) that encodes the specified region, and includes a system that allows expression of (I) at the surface of the bacterial membrane. Also new are: (1) conjugated polypeptides produced this way; (2) live bacteria expressing the polypeptide; and (3) a DNA sequence encoding (I), or its homolog, and including elements ensuring its expression at the surface of a non-pathogenic Staphylococcus. Preferably, DNA encoding (I) is attached to a spacer sequence (especially encoding the human serum albumin binding domain of streptococcal G protein) to generate a fusion protein. This ensures optimum presentation of (I) at the cell surface. The host is especially Staphylococcus xylosus or Staphylococcus carnosus. DNA may be introduced as a plasmid or integrated into the bacterial chromosome. (I), also bacteria that produce them, are useful in vaccines to protect against RSV infection. (37pp)

2/AB/10 (Item 4 from file: 357)  
 DIALOG(R) File 357:Derwent Biotechnology Abs  
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0108912 DBA Accession No.: 90-11603  
 Tryptophan promoter derivatives on multicopy plasmids: a comparative analysis of expression potentials in Escherichia coli - expression of E. coli galactokinase and human recombinant serum albumin  
 AUTHOR: Latta M; Philit M; Maury I; Soubrier F; Deneffe P; Mayaux J F  
 CORPORATE AFFILIATE: Rhone-Poulenc  
 CORPORATE SOURCE: Laboratoire de Genetique, Institut de Biotechnologie, Rhone-Poulenc Sante, 13 quai Jules Guesde, BP14F, 94403 Vitry-sur-Seine Cedex, France.

JOURNAL: DNA Cell Biol. (9, 2, 129-37) 1990  
 CODEN: 3596J

LANGUAGE: English

ABSTRACT: To determine if transcriptional initiation from a tryptophan-regulated promoter (Ptrp) could be improved to obtain high production levels of heterologous proteins in Escherichia coli B strain, several Ptrp derivatives were constructed that contained either upstream regions of various lengths or multiple core promoter cassettes in tandem. The effects were also studied of the insertion of the trpR gene, coding for the Trp repressor, into the expression vectors. The in vivo strength and regulation of the different constructions were monitored both on the easily assayable E. coli galactokinase (EC-2.7.1.6) and on the expression of heterologous human serum albumin. Plasmid derivatives containing sequences upstream from the -35 region or multiple copies of Ptrp produced 2-fold higher levels of protein than plasmids with a minimal Ptrp truncated at -40. Expression of human serum albumin was improved significantly (13% rather than 7%) of total proteins if both the upstream Ptrp region, which enhances promoter strength, and the intact trpR gene were included on the plasmid. (33 ref)

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### Status: Signed Off. (25 minutes)